

Log P-211

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: October 5, 1982

Forwarded to:

Honorable Howard Dugoff
Administrator
Research and Special Programs
Administration
U.S. Department of Transportation
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

P-82-42

The National Transportation Safety Board has reviewed the Notices published by the Materials Transportation Bureau (MTB) of the U.S. Department of Transportation: "Petition for Waiver" and "Grant of Waiver," Docket No. 82-3W, Notices Nos. 1 and 2, which appeared at 47 FR 16248 and 47 FR 20715 on April 15, 1982, and May 13, 1982, respectively. Both Notices concerned the repair of girth weld defects in approximately 635 miles of 42-inch diameter gas transmission pipeline constructed by the Northern Border Pipeline Company (Company). This pipeline section was constructed in 1981 through the States of Montana, North Dakota, Minnesota, and Iowa. The Notices also concerned "possible repair of defects in approximately 181 miles (of pipeline) to be constructed in 1982."

As reported in Notice No. 1, the weld defects were not detected by the Company's x-ray technicians responsible for quality assurance, but rather when an audit of the weld x-rays was performed after the pipe was buried. The Safety Board is concerned that important issues raised by the audit were not pursued by the MTB before the waiver was granted, for example:

1. Why were these weld flaws not detected and corrected immediately after they were x-rayed?
2. Why did weld flaws occur only in the eastern sector and not in the western sector of this pipeline?
3. Were the x-ray technicians properly qualified and adequately experienced?
4. Were the welders properly qualified for the procedures used?
5. Did the Company employ enough qualified inspectors to assure that all welding was done in compliance with its standards?

It is apparent that in constructing the 635-mile pipeline, the Company did not perform adequately the inspection and testing required by 49 CFR 192.241(c), nor did it meet the applicable provisions of the 15th Edition of API Standard 1104, "Standard for Welding Pipe Lines and Related Facilities." It is a matter of concern to the Safety Board that the Office of the Federal Inspector, which is responsible for assuring compliance with the Federal safety requirements by the Company, did not detect these violations during its monitoring of the Company's construction and that the MTB apparently has not pursued any inquiry into this matter. Further, in granting the requested waiver, the MTB did not require any action to address, in future construction, those areas of noncompliance by the Company or to improve the quality of compliance monitoring by the Federal Inspector. The Safety Board believes that such action was urgently needed to minimize the possibility of future pipeline construction containing flawed girth welds or other defects.

The Safety Board is aware that the 181 remaining "to be built" miles of pipeline construction covered by the waiver already have been completed. Nevertheless, the Safety Board believes that the answers to the above questions should have been of priority concern to the MTB and should have dictated that the MTB require changes in the quality control program established for the construction of the remaining 181 miles of pipeline rather than grant a waiver in advance of a demonstrated need.

Therefore, the National Transportation Safety Board recommends that the Research and Special Programs Administration:

Discontinue the practice of granting waivers prospectively which permits the repair rather than the replacement of defective welds on pipelines yet to be constructed.
(Class II, Priority Action) (P-82-42)

BURNETT, Chairman, GOLDMAN, Vice Chairman, McADAMS, BURSLEY, and ENGEN, Members, concurred in this recommendation.

By: Jim Burnett
Chairman

